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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/013,072	12/10/2001	Thomas H. Orac	P-2011/N-7696	1394
23456	7590	11/04/2005	EXAMINER	
WADDEY & PATTERSON 1600 DIVISION STREET, SUITE 500 NASHVILLE, TN 37203			NGUYEN, TAM M	
			ART UNIT	PAPER NUMBER

1764

DATE MAILED: 11/04/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

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<b>Office Action Summary</b>	<b>Application No.</b> 10/013,072	<b>Applicant(s)</b> ORAC, THOMAS H.	
	<b>Examiner</b> Tam M. Nguyen	<b>Art Unit</b> 1764	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 09 August 2005.  
 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.  
 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-6 and 8-15 is/are pending in the application.  
 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
 6) ☒ Claim(s) 1-6 and 8-15 is/are rejected.  
 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.  
 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) ☐ All    b) ☐ Some \* c) ☐ None of:  
     1. ☐ Certified copies of the priority documents have been received.  
     2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
     3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 112*

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1-6 and 8-15 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The limitations “non-mesophase soft coal tar pitch” in line 3 of claim 1 and “producing non-mesophase pitch” in line 1 of claim 15 were not described in the specification at the time the application was filed.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 2-6 and 8-14 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

It is unclear if the expression “coal tar” in lines 2 and 3 of claim 2, in line 4 of claim 3, in line 2 of claim 5 is the same as the expression “non-mesophase soft coal tar pitch” in line 3 of claim 1.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 1-6 and 8-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kalback (5,198,101).

Kalback discloses a process for producing an anisotropic pitch product by heating a petroleum or coal-derived fraction to a desired temperature and contacting the heated pitch with a sparging gas (e.g., steam or nitrogen). (See col. 3, line 62 through col. 4, line 2; col. 5, line 32 through col. 6, line 26). It is noted that Kalback does not disclose that a coal tar is heated until it becomes a soft pitch. However, Kalback discloses a coal tar is heated to a temperature of from 270 to 425° C for 4 to 10 hours. Therefore, it would be expected a soft pitch would be obtained in the heating step of Kalback. It is noted that Kalback does not disclose that the temperature of the batch is maintained at a substantially steady level with a temperature variance of no greater than 10° C. However, Kalback discloses that a hydrocarbon feed is contacted with nitrogen

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(sparging gas) at a reaction temperature of 385° C. It would be expected that the reaction be maintained at 385° C. Therefore, the temperature variance is less than 10° C. (See col. 2, line 61 through col. 3, line 14; example 1)

Kalback does not specifically disclose that the coal pitch is a non-mesophase soft coal tar pitch, does not disclose the softening point of the soft pitch, does not disclose that the batch is maintained at a temperature of between about 225 to 275° C, does not disclose the flash point of the batch is higher than about 270° C or to about 300° C, does not disclose that the flash point in the batch increases at a rate faster than the rate the soften point increases.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified the process of Kalback by using a non-mesophase coal tar pitch because Kalback discloses that any coal derived fraction can be used in the process. Therefore, one of skill in the art would use any coal fraction including a non-mesophase coal star pitch with the expectation that a non-mesophase coal star pitch would give a similar result as any other coal pitches.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified the process of Kalback by heating the coal tar at the claimed temperatures because any coal tar can be used in the process of Kalback. If a light fraction of coal tar is used in the process of Kalback, one of skill in the art would employ a low heating temperature such as the claimed temperature because the heating temperature is dependent on the characteristics of the coal tar feed.

Consequently, the modified process of Kalback would produce a pitch having a softening point and a flash point as claimed and the flash point in the batch would increase at a rate faster

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than the rate the softening point increases as claimed because of the similarities between the claimed process and the modified process of Kalback in terms of feedstock, heating temperature and sparging gas.

### ***Response to Arguments***

The argument that Kalback does not teach the use of a non-mesophase pitch is not persuasive. Kalback teaches that the feedstock is substantially free of mesophase pitch. (See col. 2, lines 65-65).

The argument that there is no indication on the use of gas sparge to control final softening point or flash points in isotropic, non-mesophase pitches is not persuasive because Kalback teaches a step of contacting the heated pitch with a sparging gas *as claimed*. It is not necessary that the prior art suggest the combination to achieve the same advantage or result discovered by applicant. In re Linter, 458 F.2d 1013, 173 USPQ 560 (CCPA 1972) (discussed below); In re Dillon, 919 F.2d 688, 16 USPQ2d 1897 (Fed. Cir. 1990), cert. denied, 500 U.S. 904 (1991).

### ***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period

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will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tam M. Nguyen whose telephone number is (571) 272-1452. The examiner can normally be reached on Monday through Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenn Caldarola can be reached on (571) 272-1444. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Tam M. Nguyen  
Examiner  
Art Unit 1764

TN



10/28/05